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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,913	09/15/2003	Jiann-Chen Chen	N81438/LPK	1253
	10/662,913 09/15/2003 Jian	77	EXAMINER	
			TSOY, ELENA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)			
		10/662,913	CHEN ET AL.			
		Examiner	Art Unit			
		Elena Tsoy	1762			
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
2a)⊠	Responsive to communication(s) filed on <u>20 Ap</u> This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under Ex	action is non-final. ace except for formal matters, pro				
Dispositi	on of Claims	, , , , , , , , , , , , , , , , , , , ,				
5) □ 6) ፟⊠ 7) □ 8) □ Applicati 9) □ 10) □	Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) 15 is/are withdrawn from Claim(s) is/are allowed. Claim(s) 1-14 and 16-18 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examiner The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the discrepance of the oath or declaration is objected to by the Examiner The Oath or declaration is objected to by the Examiner The Oath Oath Oath Oath Oath Oath Oath Oath	election requirement. pted or b) objected to by the Elrawing(s) be held in abeyance. See on is required if the drawing(s) is objected.	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4) Interview Summary (Paper No(s)/Mail Dat 5) Notice of Informal Pa 6) Other:	e			

Response to Amendment

Amendment filed on April 20, 2007 has been entered. Claims 4, 7, 19, 20 have been cancelled. Claims 1-3, 5-6, and 8-18 are pending in the application. Claim 15 is withdrawn from consideration as directed to a non-elected invention.

Specification

The amendment to the Specification and Abstract filed April 20, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: a new range of "greater than 100 percent to about 120 percent". Although the new range of 100-120 percent is within the original range of 80-120, it constitutes a new matter because the specification as originally filed discussed nowhere the criticality or importance of the new range.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

1. Objection to claim 1 because of the informalities has been withdrawn due to amendment.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Rejection of claims 1-14, and 16-18 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn due to Applicants' explanation.

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- 4. Rejection of claim 19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn due to cancellation of the claim.
- 5. Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17 and 18 recite the limitation "The method of claim 16, wherein said cured thermoplastic polymer" in lines 1-2. There is insufficient antecedent basis for this limitation in the claims because claim 16 does not recite "a cured thermoplastic polymer".

Claims 17 and 18 recite the limitation "The method of claim 16, wherein said cured thermoplastic polymer is a thermoplastic fluorocarbon random copolymer..." in lines 1-2 is confusing. For examining purposes the phrase was interpreted as "The method of claim 16, wherein said cured thermoplastic polymer topcoat layer is a thermoplastic fluorocarbon random copolymer".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 7. Claims 1-14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al (US 5,750,160) for the reasons of record set forth in paragraph 6 of the Office Action mailed on 10/10/2006 because:
- (i) the nickel material described in the Weber et al is <u>not</u> electroformed but deposited by <u>vapor deposition</u> (See column 1, lines 39-40). Since nickel <u>vapor deposition</u> is carried out generally at temperatures higher than 300°C, it is the Examiner's position that the vapour deposited nickel will not outgas or release volatile compounds at 300°C or higher (i.e. nickel of Weber et al is claimed high temperature nickel);
- (ii) Weber et al teach that the nickel shell has <u>essentially</u> the same coefficient of thermal expansion as a steel mandrel. It is the Examiner's position that coefficient of thermal expansion of "100.001% or 100.01%" (claimed greater than 100%) is <u>essentially</u> the same coefficient of thermal expansion as 100%.
- 8. Claims 1-14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al, Hartley et al (US 4,853,737) and Chen et al for the reasons discussed above and for the reasons of record set forth in paragraph 7 of the Office Action mailed on 10/10/2006.
- 9. Claims 1-14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al/Applicants' admitted prior art in view of Weber et al, Hartley et al and Chen et al/, further in view of Badesha et al (US 5,141,788) for the reasons discussed above and for the reasons of record set forth in paragraph 8 of the Office Action mailed on 10/10/2006.
- 10. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al/Applicants' admitted prior art in view of Weber et al, Hartley et

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al and Chen et al/, further in view of Petropoulos et al (US 5021109) for the reasons discussed above and for the reasons of record set forth in paragraph 9 of the Office Action mailed on 10/10/2006.

- 11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al/Applicants' admitted prior art in view of Weber et al, Hartley et al and Chen et al/, further in view of Mikkelsen (US 6,071,110) for the reasons discussed above and for the reasons of record set forth in paragraph 10 of the Office Action mailed on 10/10/2006.
- 12. Claim 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al/Applicants' admitted prior art in view of Weber et al, Hartley et al and Chen et al/, further in view of Schlueter, Jr. et al (US 5,995,796) for the reasons discussed above and for the reasons of record set forth in paragraph 11 of the Office Action mailed on 10/10/2006.

Response to Arguments

3. Applicants' arguments filed April 20, 2007 have been fully considered but they are not persuasive.

Applicants argue that the nickel material described in the Weber et al. reference is listed in the Table I on Page 12 as "Nickel (electroforming)" and noted to exhibit significantly less desirable properties than the high temperature nickel of Applicants invention. Moreover, the invention relates to thermal expansion of the machine mandrel greater than that of the sleeve (Page 7, Line 5-6). This important aspect of Applicant's invention is not shown or in any way taught by Weber, et al or any other art known to Applicant.

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The Examiner respectfully disagrees with this argument. In contrast to Applicants argument, the nickel material described in the Weber et al. reference is <u>not</u> electroformed but deposited by <u>vapor deposition</u> (See column 1, lines 39-40), which is carried out generally at temperatures higher than 300°C so that the vapour deposited nickel will not outgas or release volatile compounds at 300°C or higher. Furthermore, Weber et al teach that the nickel shell has <u>essentially</u> the same coefficient of thermal expansion as a steel mandrel. It is the Examiner's position that coefficient of thermal expansion of "100.001% or 100.01%" (claimed greater than 100%) is <u>essentially</u> the <u>same</u> coefficient of thermal expansion as 100%.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy Primary Examiner Art Unit 1762

June 4, 2007